AMENDMENT TO THE CLAIMS

Listing of Claims:

1. (Currently Amended) A block encoding method, comprising steps of:

forming an original block group having n+1 original blocks of m-bit message, "m" being a positive integer and "n" being an odd integer greater than "m";

encoding a first original block of m-bit message of the original block group to a reference block of n-bit codeword; and

encoding n original blocks of m-bit message placed after the first original block of m-bit message in the original block group to generate n weighted blocks of n-bit codeword, each of which corresponds to an A type weighted block or a B type weighted block, depending on a bit sequence of the reference block,

wherein a bit number "a" of bit "1" in an A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$, "a" being a positive integer, and the bit number of "1" in a B type weighted block of n bits is given by "n-a".

2. (Original) The method of claim 1, wherein the reference block of n-bit codeword is an A type weighted block.

3. (Original) The method of claim 2, wherein a bit of "1" in the reference block corresponds to an A type weighted block.

4. (Original) The method of claim 3, wherein a bit of "0" in reference block corresponds to a B type weighted block.

5. (Original) The method of claim 1, wherein if the original block group is a $(2N-1)^{st}$ original block group, the reference block of n-bit codeword is an A type weighted block, "N" being a positive integer.

6. (Original) The method of claim 5, wherein if the original block group is a $2N^{th}$ original block group, the reference block of n-bit codeword is a B type weighted block.

7. (Cancelled).

8. (Currently Amended) A block decoding method, comprising steps of:

forming a coding group having n weighted blocks of n-bit codeword, "n" being an odd integer;

generating a sequence of reference bits from the n weighed blocks of n-bit codeword, wherein each reference bit implies that a corresponding weighted block is an A type weighted block or a B type weighted block;

decoding the n weighted blocks of n-bit codeword of the coding group to generate n corresponding original blocks of m-bit message; and

reconstructing a first original block of m-bit message from the sequence of the reference bits,

wherein a bit number "a" of bit "1" in an A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$, "a" being a positive integer, and the bit number of "1" in a B type weighted block of n bits is given by "n-a".

9. (Original) The method of claim 8, wherein the sequence of the reference bits is identical to a bit sequence of a reference block of n-bit codeword, which is generated by encoding the first original block of m-bit message.

10. (Original) The method of claim 9, wherein a bit of "1" in the reference block represents an A type weighted block.

11. (Original) The method of claim 10, wherein a bit of "0" in the reference block represents a B type weighted block.

12. (Original) The method of claim 8, wherein if the coding group is a $(2N-1)^{st}$ coding group, the reference block is an A type weighted block.

13. (Original) The method of claim 12, wherein if the coding group is a $2N^{th}$ coding group, the reference block is a B type weighted block.

14. (Cancelled).

15. (Currently Amended) A block encoding/decoding apparatus, comprising:

a buffering device for outputting a digitalized image signal on a basis of an original block of m-bit message and generating a timing signal for notifying when the original block is outputted, "m" being a positive integer;

a first control part for determining whether the original block is a first original block of m-bit message when the timing signal is first generated from the first buffer;

an encoding part for encoding, if the original block is the first original block, the first original block as a reference block of n-bit codeword, and if otherwise, encoding the original block as a weighted block of n-bit codeword, which is represented as an A type weighted block of n-bit codeword or a B type weighted block of n-bit codeword, under a control of the first control part based on a bit sequence of the reference block, "n" being an odd integer larger than "m";

a switch for transmitting the reference block to the first control part and transmitting the weighted block to a storage medium;

a buffer having a reference buffer for storing a sequence of reference bits, wherein each reference bit implies whether the weighted block is an A type weighted block or a B type weighted block, and n buffers for storing bits of the weighted block provided from the storage medium;

a second control part for determining whether the weighted block is an A type weighted block or a B type weighted block; and

decoding part for decoding the weighted block to generate a corresponding original block of m-bit message and reconstructing the first original block from the sequence of the reference bits,

wherein a bit number "a" of bit "1" in an A type weighted block of n bits satisfies a relation $2^m < {}_nC_a$, "a" being a positive integer, and the bit number of "1" in a B type weighted block of n bits is given by "n-a".

16. (Original) The apparatus of claim 15, wherein the first control part has a counting unit for counting the number of the timing signal provided from the first buffer.

17. (Original) The apparatus of claim 16, wherein the counting unit is reset on receiving an $(n+1)^{th}$ timing signal generated from the first buffer.

18. (Original) The apparatus of claim 15, wherein the reference block of n-bit codeword is an A type weighted block.

19. (Original) The apparatus of claim 18, wherein a bit of "1" in the reference block corresponds to an A type weighted block.

20. (Original) The apparatus of claim 19, wherein a bit of "0" in the reference block corresponds to a B type weighted block.

21. (Original) The apparatus of claim 15, wherein the sequence of the reference bits is identical to the bit sequence of the reference block.

22. (Cancelled).